

Claims:

1. Method for coupling energy in order to change mechanical or chemical property of target molecules or microorganisms, comprising;
 - (a) providing energy having predetermined parameters in terms of power, wavelength, duty cycle and repetition rate, projected from an outlet of at least one energy source;
 - (e) providing a stream of liquid having a predetermined flow rate;
 - (f) directing said stream of liquid to a contact with a destination site;
 - (g) directing said energy along a trajectory of said stream of liquid;maintaining said stream on said destination site for a period and under conditions sufficient for altering at least one chemical or mechanical property of at least 50 percent of particular target molecules or of particular microorganism species located between the energy source and the destination site;
2. Method for coupling energy according to claim 1, wherein a plurality of destination sites are being periodically replaced opposite the stream of the liquid while the liquid stream is being maintained in contact with each destination site for said period and under said conditions.
3. Method for coupling energy according to claim 1, wherein the stream of the liquid is being moved along a plurality of destination sites while being maintained in contact with each destination site for said period and under said conditions.
4. Method according claim 1, wherein the destination site is an item or substance suspected as afflicted by noxious biological or chemical species.
5. Method according claim 1, wherein the destination site is selected from pre-filled containers, filled containers, surfaces, humans, mammals, vehicles, medical instrumentation, conveyors, conveyor belts, foods, fruits, vegetables, salads.

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6. Method for coupling energy according to claim 1, wherein the energy is a sonic vibration energy in the range of between 1 Hz and 1 GHz.
7. Method for coupling energy via streaming liquid according to claim 1, wherein the energy is a light energy radiation having a wavelength of between 1nm and 1,000nm.
8. Method according to claim 1, wherein at least one energy source is a laser.
9. Method according to claim 1, wherein at least one energy source is a pulsed 266nm laser.
10. Method according to claim 1, wherein at least one energy source is a pulsed 355nm laser.
11. Method for coupling energy according to claim 1, wherein the energy comprises light radiation waves and sonic vibration waves.
12. Method for coupling energy according to claim 1, wherein the liquid stream is non-piped along at least one portion of its path.
13. Method for coupling energy according to claim 1, wherein the liquid stream is piped inside a quartz pipe along at least one portion of its path.
14. Method for coupling energy according to claim 1, wherein the energy comprises sonic vibration waves in a frequency and amplitude useful for removing particles or microorganisms from a destination surface to which they are being attached.
15. Method for coupling energy according to claim 1, wherein the energy comprises sonic vibration waves in a frequency and amplitude useful for cracking target particles or microorganisms between the energy source and the destination site.
16. Method for coupling energy according to claim 1, wherein the energy comprises sonic vibration waves in a frequency and amplitude useful for cracking or disintegrating particles or microorganisms between the energy source and the destination site or for removing target particles or microorganisms from a

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destination surface, and wherein the energy further comprises UV light radiation useful for damaging microorganisms located between the energy source and the destination site.

17. Method for coupling energy according to claim 1, wherein the energy is pulsed in pulses having amplitude of between 1 watt/cm² and 1Gwatt/cm², time duration of between 1atosec and 1 sec, and frequency of between 1Hz and 1Ghz.
18. Method for coupling energy according to claim 1, wherein the energy is in a CW (continuous waves)form. .
19. Method for coupling energy according to claim 1, wherein the energy is in a form of pulsed waves combined with continuous waves.
20. Method for coupling energy according to claim 1, wherein the energy is in a form combining pulsed waves and continuous waves, wherein the pulsed waves are of light energy and the continuous waves or of sonic energy or vise versa, or a combination thereof.
21. Method for coupling energy according to claim 1, wherein the energy is in a form combining pulsed waves from at least two energy sources.
22. Method for coupling energy according to claim 1, wherein the energy is in a form combining pulsed waves from at least two energy sources differing from each other in their wavelength, PRT, or power level.
23. Method for coupling energy according to claim 1, wherein the wherein the energy is in a form combining pulsed waves from at least two energy sources, wherein said energy sources are synchronized to emit energy pulses in correlation.
24. Method for coupling energy according to claim 1, wherein the wherein the energy is in a form combining pulsed waves from at least two energy sources, wherein a first energy source is pulsed 266nm laser, another energy source is pulsed 355nm laser, the pulses of which follows within 150nsec the pulses of said first energy source.

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25. Method for coupling energy via streaming liquid according to claim 1, further comprising the step of monitoring at least a part of the waves of energy on at least one location between the energy source and the destination site.
26. Method for coupling energy via streaming liquid according to claim 1, further comprising the step of monitoring at least a part of the waves of energy on at least one location between the energy source and the destination site and using the monitored data for controlling the amplitude, frequency, repetition rate or duration of the energy output of the at least one energy source.
27. Method for coupling energy according to claim 1, further comprising the step of monitoring at least a part of the waves of energy on at least one location between the energy source and the destination site and using the monitored data for controlling the amplitude, frequency, repetition rate or duration of the energy output of the at least one energy source, wherein the monitored waves are of light energy and the controlled energy source is of sonic energy, or vice versa, or both.
28. Method for coupling energy according to claim 1, wherein the energy is coupled for disinfecting.
29. Method for coupling energy according to claim 1, wherein the energy is coupled for cleaning.
30. Method for coupling energy according to claim 1, wherein the energy is coupled for disintegrating sediments.
31. Method for coupling energy according to claim 1, wherein the energy is coupled for triggering a chemical reaction.
32. System for coupling energy for use at a destination site, comprising: (a) liquid supply; (b) at least one liquid launching nozzle in liquid communication with said liquid supply and capable of directing a liquid stream towards a destination site; (c) at least one energy generator capable of directing energy into and along a trajectory of the liquid towards the destination; (d) conveyor or robot, capable of periodically positioning a plurality of destination sites opposite the at least one nozzle, such that each destination site is being maintained opposite the liquid

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stream for a period sufficient to alter at least one chemical or mechanical property of at least 50 percent of particular target molecules or of particular microorganism species located between the energy source and the destination site;

33. System for coupling energy according to claim 32, wherein the liquid communication between the liquid supply and the liquid launching nozzle is via at least one quartz pipe.
34. System for coupling energy according to claim 32, wherein the at least one quartz pipe is in a rolled up pose.

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